

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------|---------------|-----------------------|------------------------|------------------|
| 10/606,078 | 06/26/2003 | Alexander I. Gilevich | 1413 | 4258 |
| 75 | 90 12/01/2006 | | EXAMINER | |
| J. E. McTagga | rt | | FORD, JOHN K | |
| Suite 105 1860 Eastman A | venue | | ART UNIT | PAPER NUMBER |
| Ventura, CA 9 | 93003 | | 3744 | |
| | | | DATE MAILED: 12/01/200 | 6 . |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | \mathcal{Y} |
|--|---|--|---------------|
| | Application No. | Applicant(s) | 0 |
| | 10/606,078 | GILEVICH, ALEXAND | ER I. |
| Office Action Summary | Examiner | Art Unit | |
| | John K. Ford | 3744 | |
| The MAILING DATE of this communication a Period for Reply | ppears on the cover sheet w | vith the correspondence addres | ss |
| A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR - after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory peric. - Failure to reply within the set or extended period for reply will, by stat Any reply received by the Office later than three months after the mai earned patent term adjustment. See 37 CFR 1.704(b). Status | DATE OF THIS COMMUN 1.136(a). In no event, however, may a od will apply and will expire SIX (6) MC oute, cause the application to become a | ICATION. A reply be timely filed ONTHS from the mailing date of this community ABANDONED (35 U.S.C. § 133). | |
| | 2/2 a/2 + 8/18/0 | , • | |
| 1) Responsive to communication(s) filed on 2 2a) This action is FINAL . 2b) The | nis action is non-final. | , | |
| 3) Since this application is in condition for allow | | tters, prosecution as to the me | erits is |
| closed in accordance with the practice under | | | <i>y</i> |
| Disposition of Claims | | | |
| 4) Claim(s) is/are pending in the applica 4a) Of the above claim(s) is/are withden 5) Claim(s) is/are allowed. 6) Claim(s) claim(s) is/are rejected. 7) Claim(s) claim(s) are subject to restriction and | rawn from consideration. | | |
| Application Papers | | | |
| 9) The specification is objected to by the Exami 10) The drawing(s) filed on is/are: a) and an applicant may not request that any objection to the Replacement drawing sheet(s) including the correction. 11) The oath or declaration is objected to by the | ccepted or b) objected to ne drawing(s) be held in abeya ection is required if the drawin | ance. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1 | |
| Priority under 35 U.S.C. § 119 | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a limit | ents have been received. ents have been received in riority documents have bee eau (PCT Rule 17.2(a)). | Application No n received in this National Sta | ige |
| Attachment(s) 1) X Notice of References Cited (PTO-892) | | Summary (PTO-413) | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) | | o(s)/Mail Date Informal Patent Application | |
| Paper No(s)/Mail Date | 6) Other: _ | | |

Applicant's responses of August 28, 2006 and August 18, 2006 have been studied carefully. Many of the claims contain new matter unsupported by the original disclosure. The submission of Appendix I by applicant is not understood. The examiner specifically requested the prior art, not drawings "which served as the basis for drawing Figs. 1 and 2" (August 18th response, page 7, third full paragraph). The requirement for full disclosure of this prior art is repeated here. If Appendix I is the prior art, then a full explanation of the differences between this prior art and what is claimed here is required. Applicant has apparently modified a preexisting X-ray inspection machine with the closed recirculation cooling system disclosed in the application. In response to this office action, the examiner is requiring that a diagram or sketch at least as detailed as what is shown in applicant's Figure 2 of this prior art X-ray machine. If it is mounted on a stand, details of the stand are required. This need not be a formal drawing and is only to facilitate further examination of the application. If applicant does not have product literature that shows what the examiner is requiring, then a carefully drawn sketch of the prior art will be sufficient.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to

one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 contains a new limitation that the control 12A is a "desk-top type" enclosure. Aside from the ambiguity of what constitutes a "desk-top type" enclosure. there is nothing in the original disclosure that suggests device 12 is anything but a stand-alone unit comprised of elements 12A-12F. It clearly does not mount on a desk. Also considered "new matter" is the limitation that the height of this "desk-top type" enclosure is less than the length of the legs forming duct 12B. There is no disclosure of this in the written specification and nothing to suggest that the drawings are drawn to scale. Finally in claim 1, applicant claims that a major portion of the structural support is accomplished by the duct unit 12B (and not by the strut 12C). In applicant's comments he states that "major portion" means greater than 50% (August 18 response, page 5). There is no original disclosure to support such a limitation. Specifically there is no disclosure of how much weight is carried by the strut 12C vis-à-vis the duct unit 12 B. The same problem exists in claim 6, wherein "minor" is defined in applicant's August 18th response, page 7, first full paragraph, as less than 50%. There is no original disclosure to support such a limitation. Specifically there is no disclosure of how much weight is carried by the strut 12C vis-à-vis the duct unit 12 B. Finally, in claim 10, there is no original disclosure for the "contiguously and seamlessly" limitation.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

Application/Control Number: 10/606,078

Art Unit: 3744

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6 and 10-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 contains a new limitation that the control 12A is a "desk-top type" enclosure. It is ambiguous what constitutes a "desk-top type" enclosure. The term has no universally understood meaning in the art and hence is vague.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 4, 5, 6 and 10 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over either one of Sharp et al

(US 2004/0180620) or Sharp et al (USP 6,506,111) and, optionally, Wintersteen (USP 6.944,020) or Landrum et al (USP 6,353,532).

Since these two references are substantially identical, Sharp '620 will be discussed with the understanding that corresponding disclosure can be found in Sharp '111. A console 12 containing electronic circuitry (servers or other electronic assemblies) arranged on support brackets 14 is disclosed. A plinth 16 formed with a duct defining a U-shaped flow path 46 communicates with the console thorough a base plate 36 via an inlet 40 and outlet 38. In paragraph 36, Sharp discloses that the console 12 is "closed such that the airflow through the cabinet is re-circulated." The duct being part of the plinth is deemed to contribute substantially to structural support of the console enclosure 12.

Regarding claim 2, see fan 18. Regarding claim 6, any one of the sidewalls of the plinth 16 are deemed to be a straight support strut that extend in the predominantly vertical inclined direction.

To have made Sharp's cabinet much shorter such as to have only a few slots for servers instead of 42 server slots would have been obvious to one of ordinary skill in the art. For example, Figure 1 of Wintersteen (USP 6,944,020) shows eleven servers in a cabinet and Figure 1 of Landrum et al (USP 6,353,532) shows only two servers (30 and 35),

Claims 1, 2, 4, 5, 6 and 10 are rejected under 35 U.S.C. 103(a) either one of Sharp et al (US 2004/0180620) or Sharp et al (USP 6,506,111) and, optionally, Wintersteen (USP 6,944,020) or Landrum et al (USP 6,353,532), in view of Fenton et al (USP 4,887,437).

While Sharp is silent on the matter of the duct defining the passageway 46 being a support structure, it is clear from Fenton, col. 5, lines 63-65, that vertical duct walls (44, in Fenton) provide structural support to the structure to which they are attached. To have made the vertical walls of the duct defining the passageway 46 of Sharp as support structures would have been obvious from the teaching of Fenton to advantageously make the plinth 16 of Sharp stronger and capable of supporting more weight.

To have made Sharp's cabinet much shorter such as to have only a few slots for servers instead of 42 server slots would have been obvious to one of ordinary skill in the art. For example, Figure 1 of Wintersteen (USP 6,944,020) shows eleven servers in a cabinet and Figure 1 of Landrum et al (USP 6,353,532) shows only two servers (30 and 35)

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over any of the prior art (Sharp or Sharp/Fenton and, optionally, Wintersteen (USP 6,944,020) or

Landrum et al (USP 6,353,532)) as applied to claim 2 above, and further in view of JP 03-250698 (Figure 1).

JP '698, Figure 1, shows two fans, one before the heat exchanger and one after the heat exchanger in the classic push-pull configuration. To have modified Sharp with push-pull fans (instead of just the push fan disclosed by Sharp) would have been obvious to one of ordinary skill to advantageously increase flow therefore advantageously increasing the heat transfer capacity of the device.

Claims 7 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 1st paragraph, set forth in this Office action, by changing "also provide a major portion" back to the original wording - - contribute substantially to - -. Claims 8 and 9, depending from such an amended claim 7 would also be allowable.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John K. Ford whose telephone number is 571-272-4911. The examiner can normally be reached on Mon.-Fri. 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JKF